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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**B.Tech IV Year I Semester Supplementary Examinations July-2022****TRANSPORTATION ENGINEERING-II**

(Civil Engineering)

Time: 3 hours

Max. Marks: 60

(Answer all Five Units **5 x 12 = 60** Marks)**UNIT-I**

- 1 a Explain step by step procedure of construction of Cement Concrete roads **6M**
b What do you understand by surface drainage system and what are the various surface drainage systems generally adopted. **6M**

OR

- 2 a Define the term W.B.M and Give a brief explanation about the construction of W.B.M roads with necessary specifications of materials used in it. **6M**
b Write short notes on i) Control seepage flow ii) Capillary cut-off **6M**

UNIT-II

- 3 a Define the term rail. What are all its function, requirements. **6M**
b Explain in detail about various track fittings used in railway. **6M**

OR

- 4 a What is the role of a sleeper in railway? Explain in detail about Cast-iron sleeper. **6M**
b Briefly explain about the Coning of wheels. **6M**

UNIT-III

- 5 a What is a level crossing? Explain its types, inspection and maintenance of them. **6M**
b Explain any few types of fixed signals with a neat diagram. **6M**

OR

- 6 a Define a railway yard and discuss the different types of station yards with a brief description. **6M**
b How the stations in Indian railways are classified according to operational characteristics and functional characteristic? **6M**

UNIT-IV

- 7 a What is an airport master plan? Briefly describe the steps in it formulation. **6M**
b Explain with neat sketches, about the Airport markings in detail. **6M**

OR

- 8 a Give a typical layout of a single runway airport showing all the components. **6M**
b Briefly explain the concept of Wind Rose diagram. **6M**

UNIT-V

- 9 a Briefly explain the historical development of water transportation in India. **6M**
b Distinguish between natural and artificial harbour. Draw a neat sketch of different types of Harbour. **6M**

OR

- 10 a What considerations are taken in selecting the location of a harbour? **6M**
b What is jetty? Explain open jetties, piled jetties & cylinder jetties. **6M**

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